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## Patent Abstracts of Japan

PUBLICATION NUMBER : 2002080933  
PUBLICATION DATE : 22-03-02

APPLICATION DATE : 28-06-01  
APPLICATION NUMBER : 2001196510

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INT.CL. : C22C 38/00 B21B 3/00 C21D 9/46 C22C 38/06 C22C 38/54

TITLE : STEEL SHEET HAVING EXCELLENT SHAPE FIXABILITY AND ITS PRODUCTION METHOD

ABSTRACT : PROBLEM TO BE SOLVED: To provide a hot rolled steel sheet and a cold rolled steel sheet having excellent shape fixability and to provide a method for producing the same.

SOLUTION: The steel sheet having excellent shape fixability has a composition containing, by weight, 0.0001 to 0.05% C, 0.001 to 2.5% Si, 0.01 to 2.5% Mn, 0.005 to 0.15% P,  $\leq 0.03\%$  S, 0.01 to 2.0% Al,  $\leq 0.01\%$  N and  $\leq 0.01\%$  O and satisfying any relation obtained by the components of the steel by mass% shown in the inequalities (1) and (2), and the balance iron with unavoidable impurities, in which the average value of the X-ray random intensity ratios in the groups of the  $[100]\langle 011 \rangle$ ; to  $[223]\langle 110 \rangle$ ; orientations of the sheet face at least in the sheet thickness of  $1/2$  is  $\geq 3.0$ , also the average value of the X-ray random intensity ratios in the three crystal orientations of  $[554]\langle 225 \rangle$ ;  $[111]\langle 112 \rangle$ ; and  $[111]\langle 110 \rangle$ ; is  $\leq 3.5$ , and further, at least one of the (r) value in the rolling direction and that in the direction orthogonal to the rolling direction is  $\geq 0.7$ :  $203\sqrt{C+15.2Ni-44.7Si-104V-31.5Mo+30Mn+11Cr+20Cu-700P-200Al}\langle 30 \rangle$  (1), and  $44.7Si+700P+200Al\langle 40 \rangle$  (2).

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